

AMENDMENTS TO THE CLAIMS

The following Listing of Claims replaces all previous listings of claims in the application.

Listing of Claims:

1. (Previously presented) A process for producing a catalyst for gas-phase oxidations, the process comprising: applying a suspension of TiO₂ and V₂O₅ particles to a fluidized inert support, wherein at least 90% by volume of the V₂O₅ particles have a diameter of 20 μm or less and at least 95% by volume of the V₂O₅ particles have a diameter of 30 μm or less.
2. (Original) The process according to claim 1, wherein at least 90% by volume of the V₂O₅ particles have a diameter of 15 μm or less and at least 95% by volume of the V₂O₅ particles have a diameter of 20 μm or less.
3. (Previously presented) The process according to claim 1, wherein at least 50% by volume of the V₂O₅ particles have a diameter of more than 2 μm.
4. (Previously presented) The process according to claim 1, wherein the suspension further comprises one or more elements selected from the group consisting of cesium, phosphorus and antimony source.
5. (Currently amended) The process according to claim 1, wherein the catalyst includes a catalytically active composition comprising from 1 to 40% by weight of vanadium oxide, calculated as V₂O₅, and from 60 to 99% by weight of titanium dioxide, calculated as TiO₂.
6. (Currently amended) The process according to claim 5, wherein the catalyst includes a catalytically active composition further comprising, based on the total amount of catalytically active composition, up to 1% by weight of a cesium compound, calculated as Cs, up to 1% by weight of a phosphorus compound, calculated as P, and up to 10% by weight of antimony oxide, calculated as Sb₂O₃.

7. (Previously presented) The process according to claim 2, wherein at least 50% by volume of the V₂O₅ particles have a diameter of more than 2 μm.

8. (Previously presented) The process according to claim 2, wherein the suspension further comprises one or more elements selected from cesium, phosphorus and antimony source.

9. (Currently amended) The process according to claim 2, wherein the catalyst includes a catalytically active composition comprises comprising from 1 to 40% by weight of vanadium oxide, calculated as V₂O₅, and from 60 to 99% by weight of titanium dioxide, calculated as TiO₂.

10. (Currently amended) The process according to claim 4, wherein the catalyst includes a catalytically active composition comprises comprising from 1 to 40% by weight of vanadium oxide, calculated as V₂O₅, and from 60 to 99% by weight of titanium dioxide, calculated as TiO₂.

11. (Previously presented) The process according to claim 1, wherein the suspension further comprises a cesium compound, a phosphorus compound and antimony oxide.

12. (Previously presented) The process according to claim 11, wherein the catalyst includes a catalytically active composition comprising:

1-40% by weight of vanadium oxide, calculated as V₂O₅, and from 60 to 99% by weight of titanium dioxide, calculated as TiO₂;

up to 1% by weight of a cesium compound, calculated as Cs, up to 1% by weight of a phosphorus compound, calculated as P; and

up to 10% by weight of antimony oxide, calculated as Sb₂O₃.

13. (Previously presented) A catalyst prepared by a process comprising:

providing a suspension of TiO₂ and V₂O₅ particles, wherein at least 90% by volume of the V₂O₅ particles have a diameter of 20 μm or less and at least 95% by volume of the V₂O₅ particles have a diameter of 30 μm or less;

and providing a fluidized support in a stream of flowing gas, and contacting the fluidized support with the suspension of TiO₂ and V₂O₅ particles to provide a supported catalyst, wherein the supported catalyst further comprises up to 1% by weight of a cesium compound, calculated as Cs, up to 1% by weight of a phosphorus compound, calculated as P, and up to 10% by weight of antimony oxide, calculated as Sb₂O₃, based on the total weight percent catalyst.

14. (Currently amended) The catalyst according to claim 13, further comprising an outer layer with an Sb₂O₃ content by weight that is 50% to 100% lower than the Sb₂O₃ content by weight of an inner layer of the supported catalyst.

15. (Currently amended) The catalyst according to ~~claim 1, claim 13~~, wherein the flowing gas is at a temperature of from 60°C to 150°C.